# Flight School XXI Simulations

Program History and the Way Ahead



# **Program History**

# Original FSXXI Simulation Vision

- Privately Funded Initiative (PFI) Concept Where the contractor develops, builds, and provides all simulators required
- Contractor provides a multifunction staff to manage, operate, upgrade simulators and provide expertise for LP, POI, and TSP development to facilitate individual, crew, and collective training
- Contractor disposes of legacy simulators as directed
- The Army pays for simulator availability to train tasks.
- Fully reconfigurable, 5 aircraft\* types (AH-64A, AH-64D, CH-47D/F, OH-58D, UH-60L/M)

• New simulators cover requirement for CMS/SFTS

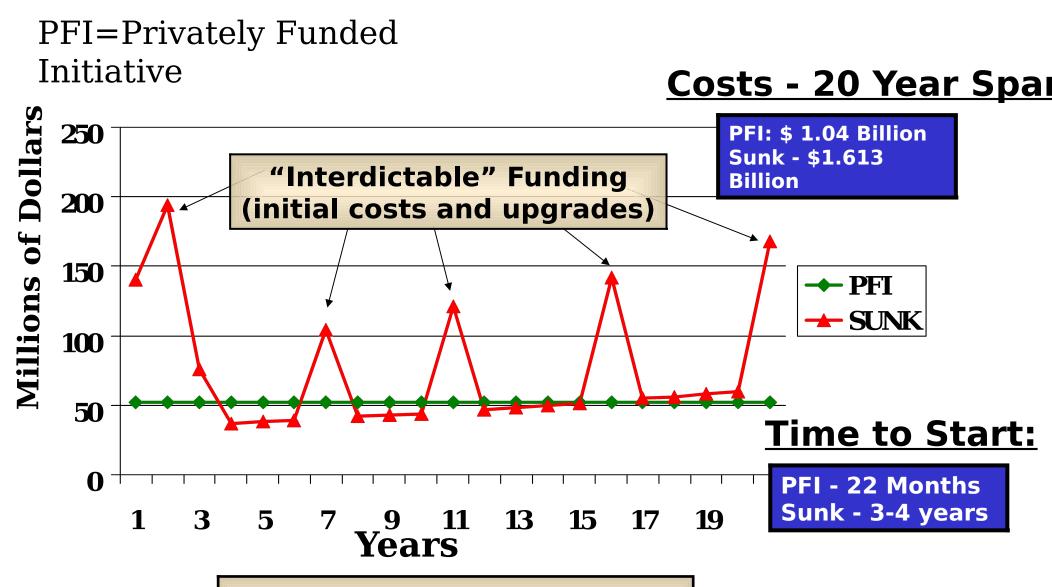
Leverage the financial and intellectual capital in industry

Reduce costs to operate simulators while maintaining concurrency

Maximizing the training potential of simulations



### Simulations: PFI vs. Sunk Cost



- Estimates based on research
- Does not include instructor costs



### Flight School XXI Sims Proposed Business Solut

#### **Option 1: Standard Acquisition (POM, OPA dollars)**

- Initial costs in excess of \$400m over 3 years
- Takes four years to see results (POM + development time)
- Government does all the work
- Government manages
- Government pays to upgrade
- Government owns the simulators
- Limited termination liability to the government
- Does not require legislative change/exception (ACAT I, DA approval)
- All risk to government



### Flight School XXI Sims Proposed Business Solut

# Option 2: 20-year Multi-year ("chunks" of years) (OMA)

- Contractor pays up-front costs, amortizes over contract
- Results within three years
- Contractor does all the work
- Contractor manages
- Shared cost of upgrades
- Contractor owns the simulators
- Termination liability to the government
- Requires change/exception to contracting law (congressional approval)
- Risks shared between government and contractor (lowers

### Flight School XXI Sims Proposed Business Solut

#### Option 3: 20-year Annual (one year at a time) (OMA)

- Contractor pays up-front costs, amortizes over contract
- Results within three years
- Contractor does all the work
- Contractor manages
- Shared cost of upgrades
- Contractor owns the simulators
- Termination liability to the government
- Does not require legislative change/exception (DA approval)
- Shared Risk between government and contractor





### **FSXXI Simulation Services**

#### Program Milestones

- 23 Jan 2002 AROC, VCSA approves "FSXXI Implementation Plan".
- 23 April thru 23 May 2002: FSXXI Simulation Services "Sources Sought" synopsis issued, via FedBizOpps. Industry identified interest as Prime, Team, or Subcontractor.
- 13 Jun 2002: USAAVNC FSXXI Simulation Services Requirements brief to SAALT, approved by NAVAIR HCA.
- 20 May 2003: VTC w/ DASA(P&P) "Acquisition Strategy Approved"
  - ASA (ALT), Army Contracting Agency (ACA), G-3 (DAMO-TR), G-8 PAE, Asst Sec Army (FM&C), Office of The General Council (OGC) and SADBU
- 20 May 2003: FSXXI Simulation Services synopsis posted to FedBizOps
- 21 July-19 Sep 2003: Source Selection
- 26 September 2003: Announcement of award to CSC
- 8 October 2003: Protest filed by CAE



### **PROGRAMMATICS**



# FSXXI Simulation Services Funding Requirements

(MDEP: TAVN; POC Mr. Shawn Johnson)

- FY 03: \$1M
- FY 04: \$20M
- FY 05: \$30M
- FYs 06-09: \$52M (FY 03 constant)
- EPP (FYs 2010-2022): \$ 52M (FY 03 constant)

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### **FSXXI Simulation Services**

Acquisition Strategy (Executive Summary)

- The FSXXI Simulation Services procurement will be issued in accordance with Federal Acquisition Regulation (FAR) Part 15.
- A Performance Based Firm Fixed-Price "Requirements" contract for services with Award Term (AT) provisions
  - The award document will include an AT Plan and Section H Award Term Clause
  - Award Term options will be based upon annual evaluations of the successful offeror's performance against the Award Term Plan.
- Full and Open Competition, "Best Value" to the Government, Price and other Factors considered.
- All monthly training services for Contracted Mission Time (CMT) will be paid for with Operation and Maintenance Army (OMA) funds.
- The performance period consists of a one (1) year base period with nineteen (19) 1-yr options; however, no task order will exceed twelve (12) months due to funding restrictions.
- An Award Term provision will be used to adjust the contract's total Period of Performance to not more than twenty (20) years, as a result of consistent quality performance by the services contractor; Likewise the total period of performance could be reduced to not less than seven (7) years, based upon sub-standard

### **FSXXI Simulation Services**

#### Acquisition Strategy Risk Management

- **Cost:** The FSXXI Simulation Services contractor will provide Firm Fixed-Price pricing for Contracted Mission Time (CMT). Failure to provide stipulated CMT will result in the imposition of a "Schedule of Deductions" to be applied against monthly CMT. Approved DD Forms 250 will track CMT services performed.
- Schedule: The FSXXI Simulation Services Request For Proposal (RFP) requires that offerors develop an Integrated Master Plan (IMP) and Integrated Master Schedule (IMS), which demonstrate a detailed understanding of what is required in order for the contractor to meet the USAAVNC services timeline, and to provide quality simulation services. The IMP will contain measurable entrance & exit criteria that will allow the Government to track the contractor's progress.
- **Performance:** The FSXXI Simulation Services Request For Proposal (RFP) requires that offerors submit a risk management system that integrates Metrics to monitor performance. Additionally, a Quality Assurance Surveillance Plan (QASP) is also required to be provided for Government review / acceptance. Lastly, the Award Term Plan (ATP)

### **OVERVIEW OF SERVICES**



Who (The Winning team)

Develo

Skills



Knowledge





OEM of Army Simulators Collective Training Interoperability/SAF CLS



Prime Contractor
System Integrator
Fechnical Service Provider
Management Services
Strong Aviation Presence
Engineering Manufacturing



Largest AVN TNG Service Org Largest U.S. Mfgr. Level D SIM



**OEM LSMP Accreditation** 

**Abilities** 



Capabilities

How (Contract Summary)

- Flight School XXI Simulation Services contract awarded to Computer Sciences Corporation (CSC), Corporate Headquarters in El Segundo, CA.
  - CSC Federal Sector Defense Group, Falls Church, VA.

#### Contract features:

- The contract awarded to CSC is a Fixed Price contract with Award-Term Provisions.
- Potential value: \$ 1.1 Billion over a nineteen and one-half years period of performance.
- CSC will provide, manage, test, install, integrate, operate, maintain and upgrade simulators concurrent with the latest fielded aircraft.
- CSC will be responsible for future concurrency updates and total life-cycle support costs of the simulators throughout the life of the contract

What (Quantity & Types of Devices)

Aircraft Configuration	OFT	IFT	18 Reconfigurable Collective Training Devices (RCTD)
TH-67 VS	7	13	
UH-60A/L	8	3	✓
CH-47D	3	-	✓
OH-58D CDS-4	2	2	✓
AH-64D Operational Flight Program (OFP) Lot 8	*1	-	✓
AH-64A Fire Control Computer (FCC) rev-51	-	-	✓
CH-47F (concurrency upgrade)	TBD	TBD	✓
UH-60M (concurrency upgrade)	TBD	TBD	✓
RAH-66	Block II	Block II	✓

**OFT:** Operational Flight Trainer (6-DOF Motion and 3-DOF Vibration systems)

**IFT:** Instrument Flight Trainer (\*3-DOF Vibration system)

RCTDs: AVCATT-A based; floor-mounted in AWSC, 100% Collective training

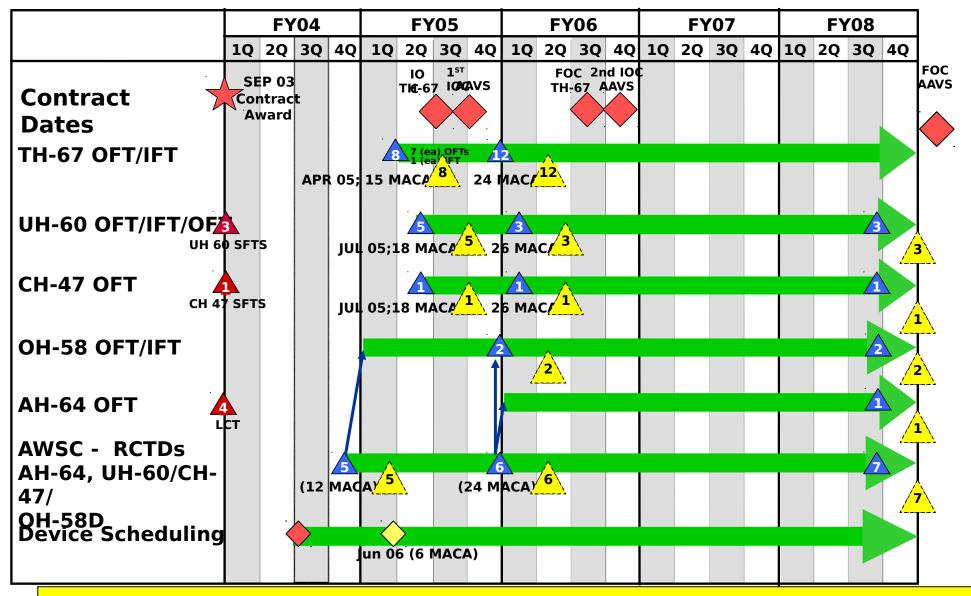
In a single location once FOC is achieved.

#### What (Training Support Services)

- The CSC multi-functional staff will
  - Schedule, manage, operate, maintain, and upgrade the TH-67 VS and AAVS
  - Schedule: AVCATT-A; LCTs; UH-1H Flight Simulators; UH-60 SFTS; CH-47 SFTS; and the CAVSIM facility training devices
  - Continue to develop training products: TTPs; CATS; MTPs; ATMs
- The CSC Training Management Services will schedule appropriate devices for all required training within the established CMT
  - Standard training week, 5 days/week, excluding holidays, 52 wks/yr
  - Standard training day, 15 Simulator hrs/day, 50 weeks/yr and 8 simulator hrs/day, for 2 wks/yr
    - 6 weekends/yr, Sat through Sun, may be required for TH-67 VSs, 10hrs/day
    - 20 weekends/yr, Sat through Sun, may be required for AAVS, 10hrs/day
- The CSC training support solution is supported by:
  - A fully automated training management & scheduling system (based on ISERA's OnSchedule-Flight)
  - Turn key logistics program with comprehensive spares package



### **Contracted Delivery Timelines**



Protest slides all dates estimated 4 months right (yellow trian



#### When (Fielding Schedule) Con't

- AAVS collective IOC 12 months after contract award
  - 5 reconfigurable collective trainers (RCTD) in AWSC
- TH-67 IOC 15 months after contract award
  - 7 TH-67 Operational Flight Trainers (OFT)
  - 1 TH-67 Instrument Flight Trainer (IFT)
- 1st AAVS IOC 18 months after contract award
  - 5 UH-60 Operational Flight Trainers (OFT)
  - 1 CH-47D Operational Flight Trainer (OFT)
- AAVS collective 24 months after contract award
  - 6 RCTD in AWSC (Collective, AH-64D and OH-58D individual training)
- TH-67 VS FOC 24 months after contract award
  - 12 Instrument Flight Trainers (IFT)
- 2nd AAVS IOC "Support all training needs" FY06
  - 1 OH-58D OFT 24 months after contract award
  - 1 OH-58D OFT 26 months after contract award
  - 2 UH-60 IFT 25 months after contract award
  - 1 UH-60 IFT 26 months after contract award
  - 1 CH-47D OFT 26 months after contract award
- FOC 57 months after contract award
  - 1 AH-64D \*OFT
  - 3 UH-60 OFTs
  - 1 CH-47 OFT
  - 7 RCTD in AWSC
  - 2 OH-58D IFTs



Where (Physical location of devices)

#### AWSC

- 18 Reconfigureable Collective Training Devices (RCTDs)
- Additional space remains for other simulation (ETOS/LCT/Door Gunnery Trainer)

#### Pratt Hall\*

- 2 UH-1H devices will remain & be incorporated into the FSXXI POI
- No facility modifications required
- Continues to support the UH-1H training without disruption

#### Goodhand\*

- 3 UH-60A/L SFTS and 1CH-47D SFTS will remain until FOC
- 4 AH-64D (LCT) remain in place
- AH-64D OFT, delivered @ FOC, can be placed in Goodhand (or AWSC)
- No facility modifications required / No disruption of training

#### Warrior Hall (New Facility)

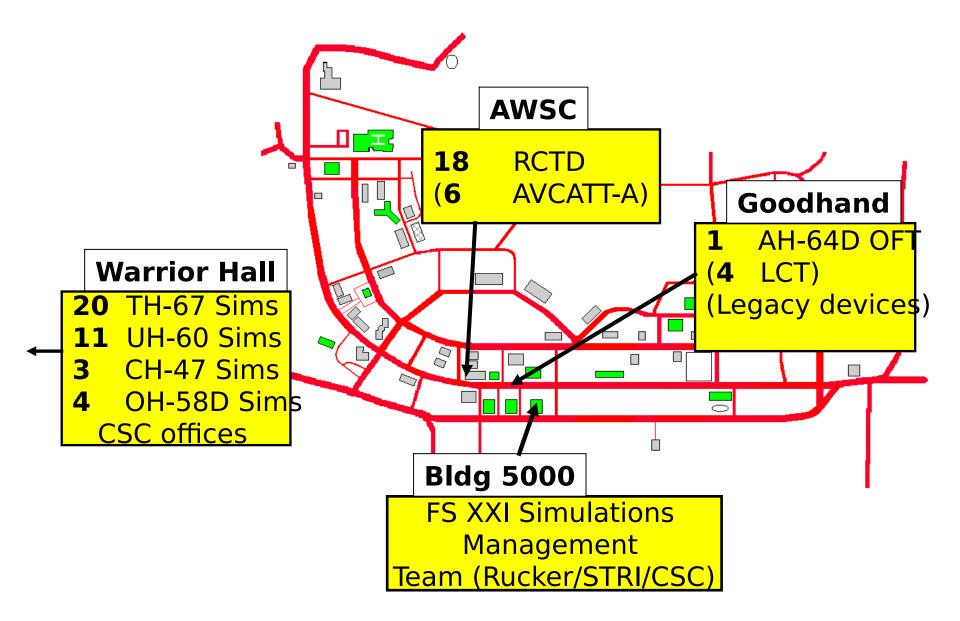
- All new TH-67/UH-60/CH-47 and OH-58D IFT & OFT devices
- Over 100,000 square feet (up to 40 flight bays)
- Adjacent to FlightSafety Daleville facility
- 12 months to complete

#### CAVSIM Facility

- 7 Low Fidelity Fully Reconfigurable Experimental Devices (FREDs)
- 1 Fixed wing Experimental Device
- 1 UH-60 Battle Staff Training System (BaTS)
- 2 Stealth viewing areas
- Supporting administrative offices
- Supporting Contractor Staff (CSC employees)

\*Space available FY 06

#### **FS XXI Facilities**





Where (Physical location of devices) Con't

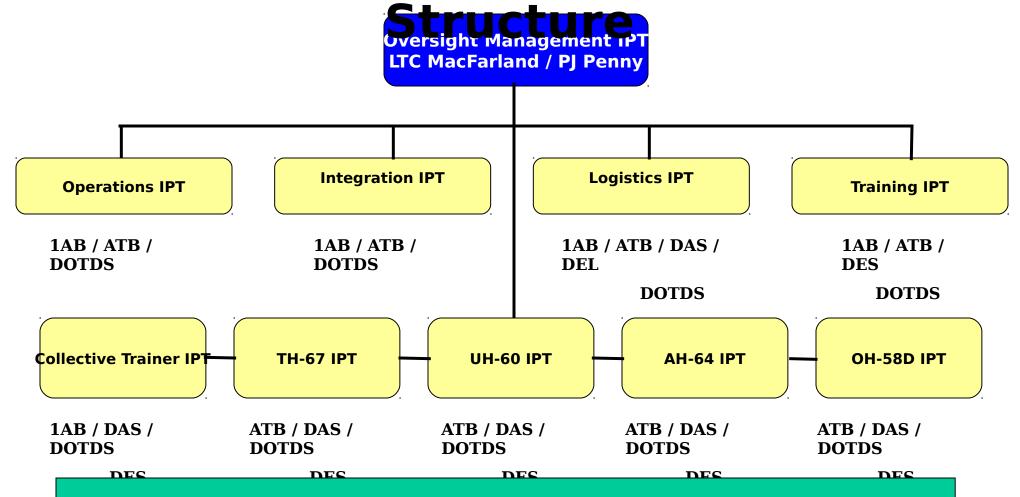
#### **Warrior Hall:**

Driven primarily by CG's

- Centrally located less than 3 miles from Ft. Ruce directive for
  - Close to Cairns, Lowe, Hanchey, and Knox facility FSXI
- Transportation
  - Transportation for students will be provided
  - Transportation will be scheduled through the ISERA Training Management System
- Communications: T-1 line in place
- Security considerations
  - Will comply with appropriate USAAVNC policies & regulations
  - Will be certified to conduct operations up to and including SECRET
- Facility ownership/responsibility at end of contract (e.g. Museum)
- Quicker start-up (ROA/DOA 18-24 months)
- Vendor/supplier access (Gate security control)
- Community integration

## THE TEAM

### Integrated Product Team



Key IPT Structures Established and Prepared to Execute on Contract Award

Most people will be on two or more teams. IPTs will form and dissolve as needed. IPTs will include 1AB, ATB, DAS, DES, DEL, DOTDS, and others as required. IPT Compositions determined during Post-Award Conference



### USAAVNC / PEO STRI Management Team

#### Organizational Responsibilities

- PEO STRI, (executor) responsible for:
  - Managing the FSXXI Simulation Services contract.
  - Ensuring that FSXXI simulations are interoperable with other training systems (via Partnering).
- USAAVNC, (customer) responsible for:
  - Technical & Training Subject Matter Experts (SMEs) to support: testing, integration, installation, accreditation, and operations of the FSXXI Simulation devices and services.
  - Assessing the efficiency of the simulation services.
  - POM for funding
- A comprehensive set of gov't / contractor Integrated product Teams will be established to facilitate management of the services.
  - IPT membership will c/o USAAVNC Matrix personnel, PEO STRI, FSXXI SETA SMEs, and the FSXXI Simulation Services contractor.



## **Road Ahead**

#### Conclusion

The FSXXI Team USAAVNC / PEO STRI / CSC is ready and committed to provide a "World-Class training solution for the United States Army Aviation Center, including quality life-cycle management of FSXXI devices and "Turnkey" logistics support!

Recommend CG sign MOA



# **Backup Slides**

# **USAAVNC PME, Training, and Sims Links**

